ABSTRACT OF THE DISCLOSURE

Digital video data is encryptically processed and then subjected to an encoding procedure with orthogonal transform to produce a coded video signal. A representative value of luminance of pixels of the digital video data is obtained for each of pixel blocks having a predetermined number of pixels, each pixel block corresponding to a unit of data subjected to the encoding procedure, as a quantized integer for each pixel block by using a specific function with the stored luminance data as a parameter. It is determined whether the quantized integer of the representative value for each pixel block is a multiple of a preset integer N of two or larger, and, if not, the stored luminance data are rewritten with a specific requirement giving the least range of change in gradation so that the quantized integer becomes a multiple of the integer N, whereas the stored luminance data remain unchanged if the quantized integer is a multiple of the integer N, thus the digital video data being encryptically processed. The encryptically processed digital video data is encoded with orthogonal transform to produce a coded video signal. The coded video signal is decoded. A second representative value of luminance data of the decoded signal is obtained as a quantized integer for each pixel block by using the specific function with the luminance data as the parameter. The quantized integer of the second representative value is divided by the integer N. It is determined that the video data has been tampered with when remainders of division meet predetermined tamer criteria.